

**United States Patent** [19]  
**Lauenstein et al.**

[11] **Patent Number:** 4,932,423  
[45] **Date of Patent:** Jun. 12, 1990

[54] **TOBACCO FEEDING APPARATUS**

[75] **Inventors:** Michael Lauenstein, Cormondrèche;  
Bernard Tallier, Gorgier, both of  
Switzerland

[73] **Assignee:** Fabriques de Tabac Reunies, S.A.,  
Neuchatel, Switzerland

[21] **Appl. No.:** 268,989

[22] **Filed:** Nov. 9, 1988

[30] **Foreign Application Priority Data**

Nov. 16, 1987 [CH] Switzerland ..... 4450/87

[51] **Int. Cl.<sup>3</sup>** ..... A24C 5/39

[52] **U.S. Cl.** ..... 131/110; 131/108;  
131/109.1; 131/109.2; 131/84.3

[58] **Field of Search** ..... 131/110, 108, 109.1,  
131/109.2, 84.1, 84.3

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

3,544,167 12/1970 Fuchu et al. .... 131/110  
3,580,644 5/1971 Ballard ..... 131/110  
4,832,058 5/1989 Labbe ..... 131/110

**FOREIGN PATENT DOCUMENTS**

2139870 11/1984 United Kingdom

*Primary Examiner*—V. Millin

*Assistant Examiner*—Jennifer L. Doyle

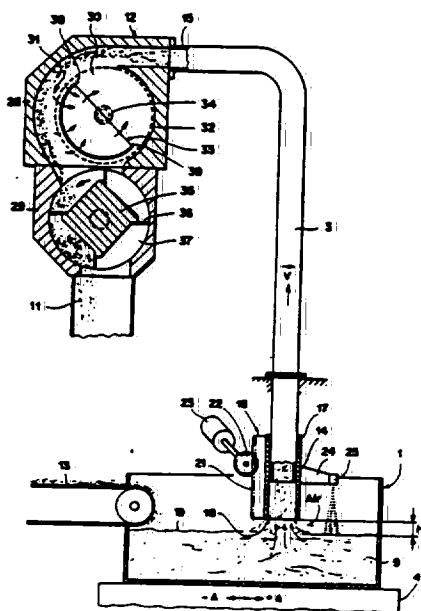
*Attorney, Agent, or Firm*—Jeffrey H. Ingerman

[57]

**ABSTRACT**

In apparatus for feeding tobacco to cigarette-making machines, the tobacco (9) is conveyed by suction from a feed receptacle (1). One end (14) of a duct (3) facing the receptacle above the level (19) of the tobacco is provided with a device (16) for regulating the rate of tobacco delivery in order to allow continuous feeding of the cigarette-making machine. The regulating device comprises a movable sleeve (17) slidable on the end portion (14) of the duct so that the bottom rim (18) of the sleeve is always at a required distance H from the level of the tobacco, this distance being continuously detected by a sensor (25), and the quantity of tobacco drawn into the duct to be adapted to the rate of production being a function of H. The other end (15) of the duct opens out into a tangential separator (12). The regulating device combined with the tangential separator makes it possible to reduce damage to the particles of tobacco.

8 Claims, 3 Drawing Sheets



2021343063